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## **Adjusting to Social Change - A multi-level Analysis in three cultures**

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<b>14. ABSTRACT</b> The last three decades have witnessed considerable interest in the psychology of migration between nations, with a number of factors (e.g., personality, age of migrant, national policy of the adopted country) seen as contributing to the migration experience. However large-scale internal population movement also presents a major challenge too many societies, although this has been less studied. In this report we document an analysis of two studies in which data was collected from three cultures across three continents with very different histories and present presses on internal migration. This diversity of countries allowed us to examine the impact of different motivations for migration, the relative 'fit' of these migrants within the local communities, and the influence of both regional and national policies towards migration. By incorporating recent developments in the appraisal of change and the theory of social axioms our work provides new understandings of the manner in which societal sub-group and culture interact in the appraisal of internal migration, and the implications of this appraisal for specific behavioral and attitudinal responses. In the first part of our report we present the results of the analysis of quantitative survey data collected from a total of 799 respondents from across three countries: China, Georgia and the U.S. We provide new models linking individual and group level characteristics of the migrants with perceived evaluations of the success of their move and consequent outcomes. In the second part of the report we turn to the ways in which reactions of particular official representatives help frame this migration experience. Combining our questionnaire data with in-depth qualitative interviews provides us with unique opportunities to match migrant appraisals with community responses to migration in these three cultural settings, allowing for a more integrated analysis of the impact of internal migration across groups and cultural settings. We analyzed 38 expert interviews conducted in these 3 countries with representatives ranging from local mayors and health officials to government ministers and a senior member of the House of Representatives. This helps 'complete the circle', providing an understanding of how internal migrants both perceive their migration and how this migration is perceived by local communities, as well as government agencies and their representatives.					
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1. Structured Summary

- More people move within than between countries, yet psychologists have paid little attention to the factors influencing adjustment to a new location, or the broader societal consequences of this move. Understanding such dynamics is crucial for comprehending civic engagement and social cohesion following voluntary or involuntary migration (e.g. after civil conflicts or war).
- In this multi-method project, researchers from the UK, China, US and Georgia modelled the adjustment of 799 internal migrants from China, Georgia and the US, and its implications for well-being, risk-taking, and civil engagement.
- In addition, 38 in-depth expert interviews in China, US and Georgia, with key informants including city mayors, government ministers, and a member of the US House of Representatives, provided the ‘other side’, exploring locals’ reactions to this migration and its implications for resources and community functioning.
- Findings demonstrated the roles of beliefs and values, support from others, and control over migration as significant predictors of migration adjustment. This in turn was associated with migrant’s trust, political involvement, risk taking and well-being. However, significant culture differences underlined the influence of both local factors and motivations for migration.
- While communities were generally receptive to migrants, local attitudes depended on the composition of the local community and their own migrant history, as well as key characteristics of the migrating group.
- Findings have applied value for military forces whose presence is often associated with the large-scale movement of civilian populations, and who need to better understand the

resettlement and integration of migrant groups into local communities. They are also relevant for understanding social cohesion in societies witnessing large-scale voluntary migration (e.g. in contemporary China).

- Future projects could fruitfully build on these findings in helping better understand the psychological and social ramifications of significant population movements.

## 2. Introduction

The last three decades have witnessed considerable interest in the psychology of migration between nations, with a number of factors (e.g. personality (Tartatovsky, 2009), age of migrant (Mariño, Stuart & Minas, 2000), national policy of the adopted country (Cislo, Spence & Gayman, 2010)) seen as contributing to the migration experience. However large-scale internal population movement also presents a major challenge to many societies, although this has been less studied (Reuveny, 2008). An estimated 381 million people migrate internally worldwide (Gallup, 2013), a figure exceeding the total estimated numbers of international migrants (International Organization for Migration, 2013). Reasons for this migration vary across countries. Large scale military interventions, civil conflicts all act as important drivers of such internal migration – alongside (and sometimes combined with) economic factors, family pressures and movements motivated by occupational, family or study requirements. Although much previous research has focused on the economic consequences of internal migration (Cooke, 2003), less is known about the psychological adaptations that might follow such moves. This has implications for both mental health and well-being (Nowok, van Ham, Findlay & Gayle, 2011) and wider participation within new locations (e.g. democratic involvement)(UNESCO, 2012). The response of local communities to such migration is likely to be a critical part of this adaptation (Wang, Cui, Cui, Wei, Harada, Minamoto, et al, 2010), but relatively little detailed attention has been paid to host community perceptions of internal migration. Understanding this response is likely to be critical for the prevention of conflict between a local community and migrants in their new setting.

In this report we report the analysis of two studies conducted as part of this research grant. Data was collected from three cultures across three continents with very different histories

and present presses on internal migration. This diversity of countries allowed us to examine the impact of different motivations for migration, the relative ‘fit’ of these migrants within the local communities, and the influence of both regional and national policies towards migration. By incorporating recent developments in the appraisal of change (Kim, 2008) and the theory of social axioms (Social Axioms Project, n.d.) our work provides new understandings of the manner in which societal sub-group (e.g. social classes) and culture interact in the appraisal of internal migration, and the implications of this appraisal for specific behavioral and attitudinal responses (e.g. community engagement and civic trust). In the first part of our report we present the results of the analysis of quantitative survey data collected from a total of 799 respondents from across three countries (China, Georgia and the U.S). We provide new models linking individual and group level characteristics of the migrants with perceived evaluations of the success of their move and consequent outcomes (e.g. in terms of voting commitment or trust of others in their new setting). In the second part of the report we turn to the ways in which reactions of particular official representatives help frame this migration experience. Combining our questionnaire data with in-depth qualitative interviews provides us with unique opportunities to match migrant appraisals with community responses to migration in these three cultural settings, allowing for a more integrated analysis of the impact of internal migration across groups and cultural settings. We analysed 38 expert interviews conducted in these 3 countries with representatives ranging from local mayors and health officials to government ministers and a senior member of the House of Representatives. This helps ‘complete the circle’, providing an understanding of how internal migrants both perceive their migration and how this migration is perceived by local communities, as well as government agencies and their representatives.

### **Theoretical background**

Migration provides a valuable setting for the study of societal change processes (Greenfield, 2009), giving us insight into the manner in which different ecological backgrounds combine with more proximal variables in influencing responses to societal challenges. Yet, as noted above, most studies have examined individual and group contributors to migration between countries, with few studies systematically examining those factors which lead to successful internal migration. A range of factors can be examined as contributory factors to this process. We introduce a model which combines individual, sub-group and cultural predictors as significant contributors to appraisal of migration (figure 1, appended file). We attempt to bring this all together in a relatively parsimonious model, while allow for the manner in which these variables interact (Dalglish, 2004). We use both quantitative and qualitative methods to produce the data required to examine this model.

Our model recognizes a wide range of determinants as significant in the evaluation of events and subsequent outcomes. In line with socio-ecological theory, the model places economic and political systems, along with features of the built and natural environment, as central to interpretations of, and responses to, social changes and challenges (Oishi & Graham, 2010). Common with several approaches (e.g. Zamani, Gorgievski-Duijvesteijn & Zarafshani, 2006), we consider both internal resources – assessed as personalities that are responsive to change – and external resources - the relevant support provided by others – to be moderating or mediating factors in an evaluation of change (e.g. Martin & Westerhof, 2003). We view the psychological impact of an event as best explained by accounting for the interaction between individual, group and community/cultural factors, with changes in the resources available at one level (e.g. the individual) having potential implications – both positive or negative - for resources at other levels (e.g. the group or community)(Zamani, Gorgievski-Duijvesteijn & Zarafshani, 2006). Sub-group and cultural influences are seen as important not



only in influencing the evaluation of an event, but as factors that continue to help mould responses to evaluations (Folkman, 2009; Silbereisen, Pinquart & Tomasik, 2010; Zamani et al, 2006). We also combine micro and meso-level factors (such as individual personality and local community structures), with specific characteristics of the event (e.g. reason for this migration). This allows for a combination of ‘higher’ levels of analysis alongside social psychology’s concern with more proximal levels / intra-psychic factors (Hobfoll, 1989, 2001).

### **Factors significant in evaluating migration**

#### *Individual level factors*

Migrants often undergo several social and cultural adjustments that can frustrate and clash with their personal characteristics (Boneva & Frieze, 2001). Indeed, Fulmer et al., (2010) argue that those who match their new environment will experience more positive well-being than those who do not.

### **Values, beliefs and migration**

Initial beliefs and values can inform appraisals and acculturation strategies used in the new culture (Berry, 1997). **Values** (e.g. tradition, self-direction) convey what is important to people in their lives. They can be seen as broad life goals that act as general guiding principles in people’s lives (e.g. Schwartz, 1992). In doing so, they guide perception, goals, attitudes and behaviour (Maio, 2010). Values as end-goals are likely to be important in that they underlie any cognitive reframing that might occur in the process of appraising migration. Work on migration between countries has shown that those who wish to move abroad tend to be higher on achievement and power motivation (Boneva & Frieze, 2001). Interactions in a new location are also likely to be informed by values. Migrants who, for example, value

tradition are likely to engage most readily within their migrant community, both at home and in their new setting (Goodwin, Polek & Goodwin, 2013).

In his values theory, Schwartz (1992) identified 10 value types, organized in a quasi-circumplex structure. This circumplex can be divided along two bipolar dimensions. One dimension contrasts valuing openness to change (self-direction, stimulation and sometimes hedonism values) with valuing conservation (conformity, tradition and security values). The other dimension contrasts valuing self-transcendence (universalism and benevolence values) with valuing self-enhancement (power, achievement and sometimes hedonism values). We adopt this widely used model in our current study.

**Social axioms** can be defined as “generalised beliefs about oneself, the social and physical environment, or the spiritual world” (Leung et al, 2002), and “the basic premise that people endorse and use to guide their behavior in daily living” (Bond et al., 2004, p. 552). Social axioms also serve as assumptions about how the world operates in the form of X leads to Y or X is associated with Y. Leung has identified five individual-level social axioms – social cynicism, reward for application, social complexity, fate control and spirituality. Social cynicism is the belief most consistently associated with negative outcomes and behaviours and attitudes (Leung et al, submitted), with such cynicism arising from general social conditions, signifying societal failure and a sense that the environment is like a social jungle. The socially cynical avoid interactions with others (Darley & Fazio, 1980), are more likely to hold suicidal ideations (Chen, Wu & Bond, 2009) and have lower levels of life satisfaction (Lai, Bond & Hui, 2007). Social cynicism is correlated with stress (Kuo, Kwantes, Shelagh & Nanson, 2006). Reward for application suggests that by work and effort it is possible to achieve positive results, religiosity a belief in the reality of a supreme being and the positive

aspects of religious practice. Fate control reflects a belief that life is predetermined (Bond et al, 2004, p. 553). At present few studies have attempted to tie in migration outcomes with social axioms, although lack of knowledge of a society's social axioms has been shown to be predictive of poorer outcomes amongst migrants (Kurman & Ronen-Eilon, 2004). One belief that has been studied is social complexity (Goodwin et al, 2013). In the migration example social complexity beliefs encourage out-group engagement, allowing for greater understanding and identification with the new cultural group (Ward, Berno, & Main, 2002). Hence, social complexity functions as a cognitive resource (Bond, Leung, Au, Tong, & Chemonges-Nielson, 2004) particularly when trying to adjust to life in a new country.

#### **Additional individual factors**

Various other factors are likely to be important in evaluating migration and should be controlled for in such a model. For example work on moving abroad has shown that young immigrants usually adopt the host culture's values more readily than older immigrants (Marín, Sabogal, Marín, Oter-Sabogal, & Perez-Stable, 1987), with behavioral acculturation to the new environment most likely to increase amongst the young (Mariño, Stuart & Minas, 2000). In contrast, older populations seem to have more difficulty in migration. Such older migrants may have been subjected to basic socialization in their host country, and are consequently more resistant to change (Feather, 1975). We thus control for age in our analyses, alongside the associated variable of length of time in the culture.

In work with migrants, financial resources are likely to be important in predicting migration outcomes (Aykan & Berry, 1996). Those with greater financial resources tend to adjust better to their new environment (Mariño, Stuart & Minas, 2000), while those who have suffered long-term unemployment can lead to a sense of despondency and hopelessness (Schwarzer et

al, 1994). However financial, class and occupational factors are difficult to evaluate consistently across cultures, as the ‘meaning’ of a particular financial resource or occupation is likely to be culture dependent. We consider class and occupational considerations in our in-depth interviews.

### **Group factors**

Individuals are nested within their social contexts and have to deal with their stresses from within these. Resources can be shared or exchanged by communities (Zamani, Gorgievski-Duijvesteijn & Zarafshani, 2006). Micro and macro combine to help individuals adapt individually and collectively to the demands of a situation (Silbereisen et al., 2010).

### **Social networks**

Social networks can often offer resilience or buffer against changes (Sztompka, 2000; Martin & Westerhof, 2003), representing the ‘resources in others’ that can help cope with a stressor (Greenglass & Fiksenbaum, 2009). Kaniasty & Norris (2009) distinguish between perceived, received support and social embeddedness: “perceived support is helping behavior that might happen, received support is helping behavior that did happen, and social embeddedness represents the network of people who might provide or did provide these supportive acts” (p. 176f). Social relationships work as buffers against stress (as supports during difficult times) or, in a more direct manner, have a positive influence irrespective of stressors (e.g. by encouraging healthy behaviours) (Droegendijk, Velden, Gersons & Kleber, 2011; Holt-Lunstad, Smith. & Layton, 2010). Primary support is likely to be derived from romantic partners and friends and family (Lazarus & Folkman, 1984). Coherent migrant families provide a “secure base” for their members to explore and to adjust to the new cultural environment (Van Der Zee, Ali & Haaksma, 2007). However other supporters can also

provide important help to deal with other problems (e.g. banks can provide financial aid).

Acculturation research has demonstrated that supportive relations with both cultures are generally predictive of a successful acculturation (Berry, 1997). A range of supporters are likely to be important following migration. Established family in the host country can aid a new migrant (Goodwin, 2008), while friends, and the wider community, are a critical part of the resources available to deal with stressful situations (Hobfoll, 1989). Networks of friends and relatives in the receiving country are a valuable resource (Boneva & Frieze, 2001).

However the establishment of support networks may take some time following migration, and, as suggested above, may depend on the resources required to develop and maintain successful relationships (Goodwin, 2008). Following migrants from Eastern Europe to Israel, Tartovsky found social support took a number of months to fully develop, but this support was then associated with well-being in the new country (Tartakovsky, 2009)

### **Cultural level variables**

Cultures can instil in us important beliefs and values about the world, as well as 'the rules of the game' which underlie the conventions and rules of everyday social life (Rohner, 1984). Different cultures and sub-groups hold different values, and express these in varying ways (Bardi & Schwartz, 2003) and these form part of a "pool" of cultural resources (Sztompka, 2000) which can help individuals deal with life changes. For example, coping may be more collective in collectivist, compared to individualist, societies (Chang & Sivam, 2004). Some cultures have a greater sense of long-term investment than others. Persistence is a major feature of such societies, and has been used to help explain the relative prosperity of many of the 'tiger' economies of East Asia (Chinese Culture Connection, 1987). In coping with an event, we are also informed by our culture's history of past struggles (Lazarus & Folkman,

1994; Sztompka, 2000). Some cultures take a 'cyclical' view of social change, recognising that, as change is constant, both good and bad things can emerge from apparently threatening situations. This may lead to hope during hardship, but more wariness during good times (Ji et al, 2004). The Chinese, for example, see the world as ever changing; Easterners accept the world as having contradictions and changes and nonlinear developments (Ji et al, 2001). These resources are both psychological but of course also framed within the large economic environment (Zamani, Gorgievski-Duijvesteijn & Zarafshani, 2006).

### **Control over the event**

We incorporate controllability over an event in our model (Gan, Liu & Zhang, 2004). In the Common-Sense Model of Self-Regulation (Leventhal et al, 1997) controllability moderates the influence of stressful situations on adjustment (Kaiser et al., 2011). Control also helps recovery following stressful events (Bonanno et al, 2010: Kohn, Lafreniere & Gurevich, 1981). Those with an internal locus of control benefit more from social support (Lefcourt, Martin & Selah, 1984), but also use emotional responses, such as denial, when they believe they cannot control an event (Lehman & Taylor, 1988). Our previous work in Eastern Europe has demonstrated that those who believe that they have little control over their fate are more likely to engage in high-risk sexual activity, or take drugs (Goodwin et al, 2002).

### **Appraising changes**

An old challenge, recognized by many of the founding figures in the study of social changes, acknowledges the central role of appraisal/ evaluation of an event in determining responses (e.g. Lewin, 1939; Weber, 1921). Murray (1938) contrasts the objective characteristics of an environment (the alpha press: “the press that actually exists”) and the beta press (“a subject’s own interpretation of the phenomena that he perceives”). In their appraisal theory, Lazarus &

Folkman (1984) declare “it is not change per se that constitutes stress, but rather the way it is appraised and dealt with by the individual” (p. 258). Although acculturation can generate stresses, it can also offer positive opportunities and accomplishments (Berry, 2007; Boneva & Frieze). As part of the evaluation process, individuals and groups may also go through comparison processes, where they compare what they have now to previous states. This may involve reflecting nostalgically on past times: Sedikides, Wildschut, Gaertner, Routledge & Arndt (2008) propose that nostalgia offers “a reservoir of positive affect”, helping cope with acculturation difficulties.

It is also important to distinguish between short-term losses and those sacrifices made in order to garner long-term gain. Individuals may engage in “investment migration”, suffering personal losses so their children may benefit. As noted above, some cultural groups may look ahead to better times, perhaps a decade later, particularly those with greater 'long term orientation' (Chinese Culture Connection, 1987).

Migration is likely to effect different spheres of lives; we can, for example, identify economic rewards in a new situation, but social life may become difficult. Hence perceptions of change may be *domain specific*: in the words of Kim (2008) “In the time of social change, not all members of a society experience the effects of social change at the same time, to the same degree, with respect to the same aspects, or in the same way” (p. 2825). Domain satisfaction refers to satisfaction in different domains of life (van Praag, Frijeters & Ferrer-i-Carbonell, 2003). We consider the importance of specific domains in producing overall outcomes (such as life satisfaction). Jeremy Bentham (1781) considered 14 pleasures (e.g. a good name, wealth, and even memory). Van Praag et al. (2003) list six domains of satisfaction: job satisfaction, financial satisfaction, housing satisfaction, health satisfaction, leisure satisfaction

and environment satisfaction. Tomasik et al (2010) and their colleagues in the Jena study on social change and human development focus on three areas: work and occupation, intimate relationships/ family life and leisure and public life (Silbereisen et al., 2010). Cummins (1996) cites seven areas of quality of life: material, health, productivity, intimacy, safety, community and emotional well-being. Finally De la Sablonniere et al (2009) suggests examined four aspects of social change: security, education, quality of life and social environment. It is important that resources fit the context (Hobfoll, 2001) – that they have ‘goal relevance’ (Lazarus & Folkman, 1984) - and some domains may be more relevant than others depending on the context (Hsieh, 2003). As such we can look not just at the combined evaluation of a change but also the relationships between the specific dimensions in which this occurs, and the correlation between distinct areas and belief change and behavioural outcomes.

### **Outcomes of migration evaluation**

A number of outcomes are possible from any appraisal of a migration. We focus on two ‘subjective’ outcomes (well-being and trust in others) and two behavioural outcomes (civic participation and risk taking).

**Subjective well-being** is defined as life satisfaction along with positive minus negative affect (Diener, 1984). A large number of life demands have been linked to lower subjective well-being (Silbereisen et al., 2010), whereas positive appraisal of events has been associated with higher subjective well-being in (Tomasik et al, 2010). Lucas et al (2003) argue for ‘hedonic leveling’: “life circumstances are necessary for our understanding of long-term SWB; all happiness is not due to temperament” (p. 538). As such, resource loss is likely to be particularly significant in determining affect/ satisfaction (see also Hobfoll, 2001).



Acculturation work has proposed a number of models concerning the manner in which acculturating individuals adjust their acculturation styles over time (Ward, 2008). Several models have been proposed for this process. The U-curve hypothesis suggests decline after acculturation followed by recovery (Ward et al, 2001). Others suggest a morbidity hypothesis, where well-being remains poor after migration. However, the general assumptions that acculturation leads to stress and subsequent lower levels of well-being is increasingly challenged, with little evidence that migration *per se* is necessarily damaging to psychological well-being (Tartakovsky, 2009).

The reconstruction of social capital, including strong **trusting relationships** with others, is likely to be highly important for migrants. However, this is often hampered by social stigma, as evidenced by research amongst internal rural migrants in China, who reported being cheated by urban residents (Chen et al, 2011). Trust is likely to be significantly influenced by appraisal of migration experiences as well as more persisting beliefs. For example, social cynicism has been associated with poor interpersonal trust (Singelis, Hubbard, Her & An, 2003), while the axiomatic beliefs of Reward for Application, Social Flexibility and Spirituality were all positively correlated with trust towards political figures amongst Polish migrants to the UK (Goodwin et al, 2013). The establishment of trust is also likely to be informed by group level experiences, such as the receipt of social support (Kaniasty, 2011). **Voting behaviour** is one further outcome which may be mediated by both our evaluation of the acculturation process and enduring values. In particular, social cynicism, a negative view on the world, is related to an unwillingness to volunteer for organisations (Bond et al, 2004), as well as less broader social engagement (Lai et al, 2007).

Finally, **risk taking behavior** has been associated with the immediate gratification of needs often characteristic of uncertain times or large social changes (e.g. van den Bos & de Ridder, 2006). There is some evidence to suggest high rates of risk taking amongst some internal migrants across cultures (Sudhinaraset et al, 2012). Much may depend however on the interactions between migrants and the host culture, with several studies linking high risk taking with particular acculturation strategies and outcomes (e.g. Schwartz et al, 2013) - although this work to date has focused primarily just on Hispanic adolescents in the US.

### **3.1. Summary**

Whilst there has been some recognition that different sub-groups react differently to the same change (Silbereisen, Pinquart, & Tomasik, 2010) analysis has been primarily on the individual level of analysis: neglected has been a multi-level analysis that considers community and cultural responses to stressful situations, and the manner in which existing communal norms might help shape responses to these situations. Recent developments in the appraisal of change (Kim, 2008) and the theory of social axioms (Leung, in press) offers new directions for tackling these issues, alongside new multi-level techniques for data analysis. In our first study we explored the way in which individual and cultural variations in psychological and social resources and projected long-term outcomes of migration lead to both situationally specific and overall evaluations of a change. We then explore the impact of these evaluations on key indicators of societal adaptation, including trust, political involvement and high risk taking, alongside migrant well-being.

### **3.2. Methods**

#### **3.2.1. Participants:**

Respondents were selected from those areas with some of the largest populations of internal

migrants within a country: Texas in the U.S. (BBC, 2013), Shanghai in China (home to approximately 9 million internal migrants) and Tbilisi and Gori in Georgia (the location for most internal migrants following the 2008 war with Russia). In China, population census experts were consulted to draw the sample across 15 major different occupational groups. Respondents were recruited in accordance with the population census statistics in Shanghai (sex distribution 51.5% male and 48.5% female (Shanghai Bureau of Statistics, 2011), and from three age groups to reflect the age distribution in the city (18-30 years old; 31-55; 56 and above). 363 questionnaires were distributed, 14 were not returned (response rate 96%). In the U.S. participants were initially sampled via snowballing methods with promotional materials distributed widely in the Sam Houston area by students and staff in local institutions. A graduate student was then employed to ensure they fit the study criteria. Of 320 questionnaires distributed, 202 were returned (response rate 63%). In Georgia researchers from the Institute for Social Research & Analysis (ISRA) used municipality lists of Internally Displaced Persons to identify respondents with respect to gender, age and location (half from compact settlements, half living in the city). 20 respondents could not complete questionnaire due to illness, absence etc.; these respondents were then substituted by equivalent persons. Questionnaires in China and Georgia were back translated (Van de Vijver & Leung, 1997) and the two versions compared following consultation with the PI. Respondents had a mean age of 40.36 (age range 18-100, SD = 16.33): further descriptive statistics for the 3 samples are provided in Table 1. 359 respondents across the countries (45%) specified they migrated for economic reasons, 167 (21%) for family reasons, 93 (12%) to study and 256 (32%) as a result of war/conflict. As can be seen from Figure 2, reasons for migration were overwhelmingly economic in the US and China, but were solely the result of war/conflict in Georgia.

### 3.2.2. Materials

Respondents completed a structured questionnaire comprising 15 subscales (Table 2). These were 1) the 10 item measure of individual values (Lindeman & Verkasalo, 2005, 9 points from *opposed to my values* to *of supreme importance*), 2) extent to which migration has impacted on the migrants life and that of their family (3 items, 4 points from *Not at all* to *a great deal*,  $\alpha$  .64), 3) control over life following migration (4 items *none* to *a great deal*,  $\alpha$  .69), 4) problems that arose since migration across 7 life domains (7 items, 5 points from *none at all* to *a great deal*,  $\alpha$  .85) 5) evaluation of the migration across 14 life domains (Kim, 2008) (14 items, 5 points from *things are much worse than before* to *things are much better than before*,  $\alpha$ .89), 6) likelihood of returning to former location in next 5 and 10 years (4 points, from *not likely at all* to *very likely*), 7) presence of friends or family in new location prior to move (yes, no), 8) support received from others across 5 life domains (5 items, 4 points from *no support* to *a great deal of support*,  $\alpha$ .81), 9) use of internet, cell phones and landlines to contact friends and family (*less than once a month* to *more than once daily*), emotional, practical and informational support using internet (3 items, 5 points from *never* to *very often*,  $\alpha$ .81 ) and phone (3 items, 5 points from *never* to *very often*,  $\alpha$ .70), 10) social beliefs (social axioms), (4 axioms each 5 items, 5 points from *strongly believe* to *strongly disbelieve*: social cynicism ( $\alpha$ .78), reward for application ( $\alpha$ .73), social complexity ( $\alpha$ .68) and fate control ( $\alpha$ .71)), 11) life satisfaction (Diener & Diener, 1995: 5 items, 5 points from *don't agree at all* to *strongly agree*,  $\alpha$ .82), 12) high-risk behavior (Risk Aversion Scale, International Personality Inventory Pool, n.d.): 8 items, 5 points from *strongly agree* to *strongly disagree*,  $\alpha$ .78), 13) public involvement and trust (6 trust items, 4 points from *never* to *very much so*,  $\alpha$  .81), 14) involvement with community and political events (2 items, 4 points from *never* to *very much so*,  $r = .52$ ) and 15) voting in the last election if eligible (yes/no). Respondents also indicated their age, gender, ethnicity, marital status, education,

employment status and occupation, relationship status and whether they moved with partners/ children, and major reasons for migration.

### 3.3. Findings

#### 3.3.1. Descriptive findings

##### *Evaluating change and control over migration outcomes*

Respondents were generally moderately satisfied with their move, rating their life a little better than in their previous location ( $M = 3.22/5$ ). Satisfaction was greatest in the US ( $M = 3.66$ ), lowest in Georgia ( $M = 2.56$ ) ( $F(2, 757) = 292.21$   $p < .001$ ). There were medium to large effect sizes ( $\eta^2$ ) for work, finances, physical health, goal accomplishment and overall impact of the move, with satisfaction highest amongst the US migrants and lowest amongst Georgians. Conversely, respondents reported they had faced moderate levels of problems overall (2.28 on a scale from 0 (none)-5 (a great many)); again this varied by culture, with Chinese (2.00) and US (2.14) respondents reporting significantly fewer problems than Georgian respondents (2.76) ( $F(2, 757) = 26.46$   $p < .001$ ). Georgians reported greater problems with their finances and emotional well-being, with Chinese respondents reporting lesser problems in these domains. Table 3 lists individual points of comparison and problems by culture. Life satisfaction was greatest in the US samples ( $M = 3.20/5$ ) least in the Georgian ( $M = 2.13/5$ ) ( $F(2, 757) = 122.83$   $p < .001$ ). Participants most frequently rated themselves as having ‘quite a lot of control’ over their migration outcomes ( $M = 2.57/4$ ). U.S. respondents perceived they had the greatest control (2.82), Chinese the least (2.44)  $F(2, 712) = 22.99$   $p < .001$ ).

Respondents overall were split as to whether, over the next ten years, the move was likely to have an equally positive and negative impact on their lives (345, 46%) or a positive impact

(306, 41%). 64 (9%) claimed a negative impact, 35 (5%) no impact. Unsurprisingly this varied by culture ( $\chi^2(6) = 251.35 p < .001$ ), with 22% of Georgians, but only 3% of US migrants - and 2% of the Chinese respondents - rating their move as 'negative' while 83% of US respondents (28% Chinese, 25% of Georgians) rated it as simply positive. Most ambiguous were the Chinese (65% rated it as 'equally positive and negative' compared to 48% of Georgians, 11% of those from the US). Respondents were most likely to claim they were 'quite certain' about this (425, 57%), with a further 197 (26%) very certain.

Looking ahead, 67% claimed that they were 'not likely at all' (22%) or 'not very likely' (45%) to return to their original locations in the next 5 years. Respondents were most likely to report they were 'quite certain' (53%) or 'very certain' (31%) about this. Georgians claimed they were most likely to return within 5 years, migrants in the US the least ( $F(2, 756) = 56.86 p < .001$ ); certainty about this was also greater in the US and lowest in Georgia ( $F(2, 756) = 36.42 p < .001$ ). Looking further ahead 59% of respondents claimed that it was 'not likely at all' (18%) or 'not very likely' (40%) that they would return back to their original locations in the coming 10 years, with a similar level of certainty (84% were 'quite' or 'very' certain). Again, Georgians were most likely to claim they would return within 10 years, US citizens the least ( $F(2, 756) = 56.10 p < .001$ ), but again there was least certainty about this amongst the Georgians, most amongst the Americans ( $F(2, 756) = 19.16 p < .001$ ).

#### *Support from others*

Respondents were most likely to report 'a little support' from others for their health (39%:  $M = 1.34/3$ ), finances (47%  $M = 1.18$ ), and emotional difficulties and overcoming worries (both 34%  $M_s 1.22, 1.32$ ). They most frequently claimed 'no support' for their work problems (38%,  $M = 1.05$ ). This differed significantly by culture (multivariate  $F(10, 1470) = 45.33$

$p < .001$ ), but this depended too on type of support. Support for physical health and for overcoming worries was highest in Georgia, for emotional difficulties in the US and Georgia, for finances higher in the US. For all four of these supports support was lowest in China. Work related support was highest in the US and lowest in Georgia.

Across the sample a sizeable proportion claimed never or very rarely to contact their friends (42%) or family (53%) by internet; in contrast, only 11% claimed that they rarely contacted their friends by phone with the most frequent response 'a few times a week' (30%); similarly only 8% rarely contacted their family by phone, 27% doing so a few times a week. This was also culturally variable for both internet and telephone contacts, with use of both communication methods highest for US respondents and lowest for Georgians ( $F(2, 555) = 22.56$   $p < .001$  for internet support;  $F(2, 741) = 40.84$   $p < .001$  for phone support). When these methods of contact were used respondents reported that they most frequently received moderate support ('some') support for emotional, practical and information problems via both routes.

#### *Risk taking, trust and community participation*

Risk taking was highest amongst the Chinese and the US respondents, lowest amongst the Georgian ( $F(2, 756) = 34.45$ ,  $p < .001$ ). Generalised trust to others was highest amongst the US and Georgian respondents, lowest amongst the Chinese ( $F(2, 757) = 10.33$   $p < .001$ ), but towards politicians (both local and national) it was higher amongst the Chinese and Georgians compared to the US migrants ( $F(2, 757) = 24.90$   $p < .001$ ). Involvement in local politics was relatively low: 45% reported never having such involvement, 39% 'only a little'; 66% were 'never' involved in local politics, 24% 'only a little'. Overall involvement in local affairs was highest in the US, lowest in Georgia ( $F(2, 757) = 40.55$   $p < .001$ ). However, if

entitled to vote in local elections 51% had voted, with voting highest in Georgia (82%) and lowest in China (21%)  $\chi^2 (2) = 217.86 p < .001$ ).

### 3.3.2 Modelling internal migration

We ran a large number of different models, comparing measurement item fit and theoretical congruence to produce the best model for our data. To examine data normality, we used the SAS MULTINORM macro. Mardia's skewness was not statistically significant, but the kurtosis was. Further examination of the Q-Q plot of residuals, though, did not indicate a violation of the multivariate normality assumption (Khattree & Naik, 1999). Because there was a very small amount of missing data, we replaced missing values with means. Based on diagnostics, we removed significant outliers. We modeled the relationships among variables at two different levels. First, we fitted a structural model on the data pooled across three countries. Second, we fit the same structural model to the data of each country, respectively. Mplus software version 6 was employed for the analysis with maximum likelihood model. We hypothesized a mediation model depicting the relationships between variables. Theoretical rationales, along with modification indices, were referred to in order to revise the model.

We examined the measurement of values based on several fit indices, as opposed to relying on a single fit index, such as a  $\chi^2$  difference test (Cheung & Rensvold, 2002). Over the past decades, there has been a large body of research and debate on the cutoff criteria of fit indices for assessing model fit (Hu and Bentler, 1999; Kline, 2005). These indices include the  $\chi^2$  values, confirmatory fit index (CFI), the standardized root mean square residual (SRMR), the root mean square error of approximation (RMSEA), the goodness of fit index (GFI), and the incremental index of fit (IFI). Among a range of fit indices, the following were those often



reported in published research: the Chi-square, comparative fit index (CFI), the standardized root mean square residual (SRMR), the root mean square error of approximation (RMSEA), the goodness of fit index (GFI), and the incremental index of fit (IFI). Researchers tend to agree that it is not advisable to rely on one fit index to assess the model fit. Instead, using a combination of different fit indices may be more reliable. Because Chi-square is sensitive to sample size, the ideal cutoff is 3 (Kaplan, 1990). Kline (2005) recommended the following cutoff criteria for good model fit:  $SRMR < .10$ ,  $CFI > .90$ ,  $GFI > .90$ ,  $IFI > .90$ ,  $RMSEA < .08$ . Hu and Bentler (1999) suggested that a strict rule with  $SRMR < .08$  and  $RMSEA < .06$  would result in a lower type II error rate of model rejection.

A number of different strategies can be used for the analysis of values as independent variables (Lindeman & Verkasalo, 2005). We tested measurement invariance of the value instrument across three cultures in accordance with the procedure recommended by Brown (2006). Results indicated that four-factor configural invariance holds across cultures, but the latent factors were highly correlated with each other which raise the concern about multicollinearity. To simplify the latent structure, we developed a parsimonious ‘other-orientated’ ‘collectivist’ value score which combined concern for others (self-transcendence) and conservation values. Further measurement and structural models are available for this value analysis on request.

Table 4 provides the overall model fit across nations, Table 5 the standardised structural path coefficients by country. Figures 3 to 6 present model for the pooled data and country specific models. The results of this analysis demonstrate that, taking the data as a whole, those who believe in ‘reward for application’, recognise life as complex, perceive they had control over the outcome of their move and receive support from others are more likely to rate their

migration as positive overall (i.e. life is better now than pre-migration). Those with collectivist values and cynical beliefs are less positive about their move. Greater problems are reported by those who are cynical about life, believe they have little control over their fate, have lower levels of collectivistic values and receive more support from others. A positive view of migration is related to trusting others, being more politically involved, life satisfaction but also greater risk taking. Experiencing more problems following migration is related to lesser satisfaction but also willingness to be politically involved. Demographic control variables demonstrated that, overall, younger respondents and men took more risks; younger respondents were also less trusting of others, were less positive about their migration and enjoyed lower levels of life satisfaction. Those who had spent longer in their new location were generally more positive about their move, and were also likely to be more politically involved and enjoy greater life satisfaction.

Our findings, however, also displayed considerable variability, as well as congruence, between cultures. In all 3 cultures a sense of control over migration significantly predicted satisfaction with the move; in all 3 cultures younger males reported greater risk taking. There were strong positive associations too between receiving support and rating the move positively, between a positive evaluation of the move and trusting others and being satisfied with life, and between age and trust of others. However, several other culture-specific patterns were also evident. In China a belief that 'fate controlled' life was related to positive experiences since migration - but negative experiences, and more problems, in Georgia. Cynical beliefs, as well as a sense of control, were related to reporting more problems following migration in China, but to less problems in Georgia. Social support was a stronger predictor of migration outcomes in China and the US, rather than Georgia. Finally it was only in the US that problems during migration were significantly related to broader life

satisfaction.

A number of commentators have suggested that different levels of analysis are necessary not only for specifying the placement of particular variables within a model, but for the analysis and interpretation of data (Smith, 2002; Oishi et al, 2009). Conceptually, we were able to analyse our data at three levels, with the first level as individual psychological variables, the second occupation, and the third culture. However, descriptive statistics showed that data were distributed quite unequally across group cells at the second level. Moreover, the variance of unequal cell sizes differs greatly across culture. The significantly unbalanced data, along with some sparse cells, led to a potentially strong design effect. That means the efficiency of a three-level analysis would be very low, if the number of levels were not reduced. In addition, data for second level variables, gleaned from open government documents, show very small variance, which countered the effect of such variables. Considering the nature of the study is both multilevel and multisite (i.e., culturally comparative), to retain higher statistical power and cultural comparison goal, we decided to conduct two-level analysis (individual and cultural).

We therefore ran multi-level analyses, viewing the data as a nested design, with individual response variables nested within cultures. SAS PROC GLM were employed to test the nested effects of key variables as listed in the structural model. Significant nested effects are presented tables (6 to 8), along with the total variance explained by predictor variables.

The MLM results showed that axiom4 had a significant nested effect in the Chinese and Georgian cultures, but not in the U.S. Control, as well as support, had a significant nested effect in Chinese and U.S. cultures, but not the Georgian culture. Axiom1 and axiom3 had a

significant nested effect in the Chinese culture. Axiom4 had a significant nested effect in Georgian culture. Support had a significant nested effect in Chinese culture only.

In general, these results are consistent with our separate structural models in each culture, reported above, except for a couple discrepancies. For example, in the structural model of Georgian culture, control significantly affected comparison with before the move.

Of note is that comparison before the move had a significant nested effect on trust in all three cultures. This is a little different than the structural analysis, which did not show significance for the Georgian culture. On political involvement, comparisons had a significant nested effect in the U.S., and problem had a significant nested effect in China. As for life satisfaction, comparison had a significant nested effect in all three cultures.

From these results it seems that any discrepancy from these two forms of analyses is primarily associated with the Georgian culture. So particular caution is warranted in interpreting the findings pertaining to Georgia.

#### **4. Study 2: Understanding reactions by the local community**

##### **4.1. Interview data**

We conducted 38 interviews in total (13 China, 12 Georgia, 13 in the US)(Tables 6, 7). Respondents included a government minister (Georgia), a senior Republican member of the House of Representatives, and officials from various official state commissions (China). Interviewers included Terri Jagers, former Mrs US America (2008) in the US, an adjunct professor at Sam Houston State University, who used her connections in Texas to access respondents in prominent positions in the State. Georgian interviews were overseen by Tina

Asatiani (International Center on Conflicts and Negotiations, ICCN), working with two probationers at ISRA. Ms Asatiani is also running a project on community development among Gori IDPs permitting access to NGOs working with the IDPs and Gori municipality officials. In China interviewees were primarily located and contacted by two journalists, who worked for the National Xinhua News Agency and Xin Min Evening News in Shanghai. Both had good connections with government officials and resources and helped set up interviews with officials in charge of migrant worker policy, public health, education, among others.

Interviews were conducted one-to-one with the exception of one in Georgia and one in China, where senior officials were interviewed along with their colleagues. All were face to face with the exception of one telephone interview in the U.S. Respondents answered 20 open ended questions evaluating the migration, dealing with resource challenges, and tackling migration problems (Table 9), with additional questions added by the interviewers to deal with particular responses, as appropriate. This produced more than 300 pages of text. In China and Georgia transcripts were translated by professional translators into English for analytic purposes.

#### **4.2. Interview analysis procedures**

The complete transcripts were first read through by a team of five (PI, the 3 respective country representatives and a graduate student at Brunel working with the PI). A summary of initial findings was then agreed by the team. To allow comparisons of sample data initial codes were derived and agreed by the team for analysis. Coding was then conducted independently by the PI and a Brunel postgraduate student using template analysis. In an initial subsample of interviews provisional, theoretically driven codes were modified as the

data was analysed (University of Huddersfield, 2007). A list of simplified final codings, recording those that occurred in at least 4 interviews in at least one country, is produced in Table 11.

#### **4.3. Results of Narrative analysis**

**In the U.S.** most respondents were positive about the migration, seeing this as generating valuable tax dollars and viewing most migrants as fitting in well with more established populations. This seemed largely because the migrants in most of the cities analysed were well educated, qualified families who were working in specialised and valued professions and who were coming to settle in the cities, often as a result of moving out of a large metropolis. While many of these were of Hispanic or Asian origin, with a first language that was not English, they were deemed to fit in well with existing communities. Where there were demands on the local environment these were primarily in terms of water supply, roads, and education, with the new migrants seen as demanding high quality education for their children. Where there were differences with the more established community this was largely because the new migrants were seen as having more liberal attitudes, but these differences were not seen as overwhelming. There was some mention of strains on law enforcement services but these were not seen as a major issue across our respondents.

Where there was any problem this occurred amongst those who were seen as placing economic burdens on the cities, without financially contributing in a positive manner. This was mentioned as an issue where the incoming migrants were seen as not contributing economically. Other factors, such as the growing issue of drug crime in nearby Mexico, were seen as impinging then on the existing Texan community. However, this was mentioned only by one respondent and may be associated with one particular city.

**In China**, internal migration is considerable, with an estimated 9 million migrants in Shanghai arriving in the 6 months prior to our interviews. This means that migrants form a sizeable proportion of many areas of the metropolis. Migration was defined by our respondents as movement without changes in hukou (household registration). In Shanghai, most of the migrants were classified as lower class and less educated, compared to the US sample, although several respondents were keen to point out the diversity of this migration, and the different challenges faced by different segments of the migrating groups. In particular, a distinction was made between those who have acquired a permanent residence, enabling them to buy a Shanghai residence and settle down, and a temporary resident who may be less educated and intends to stay for only a few years. Migrants in the city were generally viewed as very hard working, with relatively little leisure time, and often living in poor quality shared housing. They brought in a number of benefits, particularly providing needed manual labour (the Shanghainese were seen as increasingly well educated and less willing to do this manual work), with several respondents pointing to the difficulties many established residents with accessing this labour force during the Spring holidays / New Year festival. In addition, the medical service workers pointed to the important role played by immigrant doctors and nurses. Other benefits included the provision of manufacturing jobs and food services, with several noting that breakfasts were nearly always provided by migrants. The creativity encouraged by a multicultural environment was seen as an additional benefit, and others referred to the large number of young migrants as a ‘rejuvenating’ factor for the city.

On a more negative note, the strain on municipal resources was a common theme. Housing and education were seen as particular challenges for the migrants. One important and

controversial issue was the right of migrants to take University entrance exams in the city, rather than returning to their home cities/ villages. Providing health care for large numbers of migrants were also seen as a large challenge, with the health knowledge of some migrants seen as inferior to Shanghainese; transportation was another sector under considerable strain as a result of the enlarged city. Housing was also becoming more and more difficult due to increased expense. These were noted by some respondents as typical challenges throughout the country as a result of its rapid development. There were perceptions by some Shanghainese that the migrants were dirty, and did not obey the 'civilised' rules (e.g. throwing rubbish in the wrong places, urinating in public, acting rudely or roughly); others suggested that public order/ crime increased with large scale migration, with gambling a particular habit of some migrant groups. Large congregations of different communities could also be seen as fragmenting social cohesion in the city. However it was also noted that Shanghai was a generally tolerant place famously built on immigration, and that discrimination was now less common (although one migration official did claim migrants from Anhui province are lazy, while those from Henan province are dishonest" , C23). Indeed, apart from their accent it was seen as increasingly difficult to distinguish Shanghainese from these migrants, although new migrants were perceived as likely to go out alone more than longer term residents, or congregate just within their own communities, and some suggested that their skin colour and dress may differ (although not all respondents were convinced on this). As a consequence it was not surprising that "Shanghainese hate and at the same time love the migrated workers" (Shanghai municipal worker office, C21). Greater industrialisation and opportunities in other areas of China meant that some respondents foresaw a gradual slowdown in internal migration within the country, as migrants' hometowns provided better conditions and as the major cities became increasingly crowded and unaffordable.



Finally, **in Georgia** the migrants under consideration were Internally Displaced Peoples (IDPS), who moved as a result of war in 1991/2 or 2008. Those who had fled their homes in 1991/2 were seen as a transient population who had moved back to their villages or to other locations away from Tbilisi. They were seen as having faced a large number of problems. Most of our interviews however centered around the more recent IDPs in the Gori area. The IDPs in Gori were largely agricultural workers, although there were a few teachers and other administrators who largely failed to find work in the town. Many of them lived previously in a Gorge that had been relatively isolated from the towns. These IDPs were given land and some buildings to live in. They also received health insurance benefits.

Most respondents were keen to stress that the painful circumstances in which the migration had taken place meant that it would be wrong to talk of any 'benefits'. The new migrant agricultural work did help feed the town. However, lack of employment was the primary concern for these migrants along with the associated poverty, and because of the structure of government payments and health benefits it was sometimes preferable to receive the benefits accruing to a low paid person than those given to IDPs. Housing conditions for the new migrants also provided some concern, as they lived in poorly built cottages. A recurring issue was that migrants were relatively isolated in their settlements and interacted rarely with the townsfolk; however – or maybe partly due to this - there was little mention of any conflict between the IDPs and the Gori residents (although there was some concern about the distribution of land, and the closure of kindergartens to provide rooms for the new migrants). Schooling for the new IDPs (including transportation to schools outside these settlements) was another concern, as was the costs of higher education. However, most respondents said it was not easy to distinguish between IDPs and local Gori residents, although the IDPs after

the 2008 war were inevitably suffering from post-traumatic stresses, with many recently having lost family members in the conflict. This may have been largely because the IDPs were already living in an area not far from Gori before the conflict (c. 40km), so had similar accents, even if their life styles had been a little different. This contrasts with the clear distinctions between those in the main towns and those coming from South Ossetia in 1992 or after the Abkhazian conflict in 1992. Indeed, the newer IDPs disliked being labelled as refugees.

Overall therefore it was not clear the extent to which these IDPs were coping in general in their new homes. Although the local residents were rarely hostile, the IDPs missed their villages and were finding adjustment in their new location stressful, particularly due to lack of employment. Their migration was involuntary, and a direct result of a painful and costly war. A diminution of donor attention may also mean that there was less direct help for these group 4 years after the war; the IDPs however were not confident about making their voice known for fear of governmental reprisals.

#### **4.4. Results of the Thematic analyses**

Along with identifying the background of the migrants, our analysis identified 5 major themes: the positive and negative effects of migration, challenges for the local city, changes in migration patterns over the previous 5 years and the integration of the migrants (both the extent to which they were noticeable and the reactions from local residents). We also identified significant differences between these themes/ subthemes between cultures. Chinese and US officials recognised the mixed social background of migrants to their communities; Georgians noted that most that their incomers were from an agricultural background, although there were some civil servants in the new migration. Unskilled workers

were more predominant in China, although again informants noted large numbers of professionals/elites arriving in Shanghai. The benefits to the migrants of providing housing were noted by Georgian officials – several Georgian commentators noted that, given the circumstances of their migration, there were few other benefits. In other countries migrants were recognised as helping the housing market and providing taxes (US), aiding the local economy (US, China) and providing skills and a labour force for the locality, helping create a more dynamic city (particularly in China). In terms of negative impacts, traffic was mentioned in the US and China, with pressures on the educational system and medical resources most notable in China. The social isolation of migrants was noted in China and Georgia, while criminality as a challenge for the municipality was most cited in China. These impacts required new infrastructures, including sewerage, transport and water systems and a broader financial cost (noted most frequently in the US), and led to educational, health and housing requirements (noted in all 3 countries). They also required had implications for public safety (noted most frequently in the US), and the need for new employment (most notably in Georgia).

Migrants were most noticeable by their language and accent in China, and also their educational background and appearance in that country. For some Chinese informants they were seen as behaving in a different manner (notably more unfavourably e.g. through rougher behaviour or disobeying rules); in contrast they were less noticeably different in Georgia. Locals were generally reported to be more sympathetic by Georgian and US informants, where most reported no difficulties with local communities, with a more ‘mixed’ reaction cited frequently in China.

## 5. Summary of findings, implications and further research

### 5.1. Summary

Very little previous work has combined methods to examine the ‘migrant experience’ and reactions by locals and officials to the influx of internal migrants. In our study of areas significantly impacted by internal migration in three countries we found values and beliefs to be significant predictors of migrant experiences. Those with traditional and collectively orientated beliefs may be less ‘open to Change’ and thus may find any such migration more challenging (Goodwin, Polek & Bardi, 2011). In contrast, those who acknowledge the need to work hard, recognise life (and others) as complex, and are low in cynicism, may be expected to adjust better to their move (Kurman & Ronen-Eilon, 2004). Perceived control over fate can generally aid adaptation (Gezentsvey & Ward, 2011). Positive appraisals of move can encourage political involvement and broader trust in others, demonstrating the social capital to be gained in successful migration (Morales & Giugni, 2011) as well a greater personal satisfaction in life. As previously acknowledged, risk taking is likely to be greatest amongst migrants who are male, and young (Jaeger, Dohmen, Falk, Huffman, Sunde & Bonin, 2011), although risk taking may be higher in general amongst voluntary migrants, helping explain the cultural differences in our findings (Jaeger et al, 2011).

Unsurprisingly, satisfaction with their move was greatest amongst those who voluntarily migrated (our US and Chinese respondents), compared to those whose migration was forced by war (as in Georgia). Financial/ employment issues, as well as emotional well-being, were particularly difficult for Georgians in our sample. Chinese respondents demonstrated notable ambiguity in their responses, possibly as a result of their lack of support from others. Indeed, Chinese respondents demonstrated a complex correlational relationship of support and adjustment: while support can help buffer against problems, it is also correlated with greater problems, reflecting enhanced need, as well as the potential costs of reciprocal aid (Walen &

Lachman, 2000). The ambiguity of Chinese respondents towards their move may also be reflected in the greater risk taking amongst Chinese participants, as well as their low trust towards others in general. At the same time, an acceptance of fate, central to the Chinese concept of 'yuan fen' (Yang & Ho, 1988), helped Chinese cope with their move, while in Georgia a more culturally familiar cynicism (Fairbank, 2000), no doubt reinforced by their war experiences, may have lowered expectations and was related to less problems.

The positive experience of migrants in the US was also reflected in the expert interviews. While requiring resources such as water supplies and education the US migrants in our study were largely well qualified, higher tax payers who contributed financially to the city. Once again there was some ambiguity in assessing the Chinese migration. While many Shanghainese were themselves originally migrants and welcomed a new labour supply and dynamic young incomers some viewed this migration as disruptive, identifying the newcomers as less law abiding than locals. There was greater sympathy amongst Georgian migrants (particularly the more recent wave of incomers, who were originally from nearby). However, the migrants' social isolation, as well as their lack of employment, was a regular theme in the Georgian interviews, as well as in the self-reports of our Georgian migrants, who scored lowest on family and emotional relationships when compared to their life pre-migration.

What are the broader theoretical implications of these findings in relation to our model (figure 1) and for future work in this field? In our theoretical introduction we suggested that there was no simple response to acculturation, in terms of either psychological well-being and trust in others or the behavioural responses of civic participation and risk taking. Our findings from both the SEM and MLM largely support this: overall evaluation of the success of the

move was positively related to life satisfaction, trust in others and political involvement, although the relationship with risk taking was less consistent and varied across cultures, at least within our SEM analysis. In contrast, problems faced were less significant in determining these particular outcomes. This may be because other factors further mediated the relationship between problems and outcomes, such as individual and collective coping resources, as well as particular cultural conditions. This emphasises the importance of cognitive appraisal processes in acculturation outcomes, even in situations where resource losses were potentially great across our sample (e.g. Georgia)

Our findings also illustrated how comparisons with previous conditions and problems faced also varied across life domain, although this variation was most notable in Georgia, where security conditions were improved but where economic - as well as some emotional - problems and challenges meant the overall impact of the move was generally perceived as negative. In such situations macro-level factors are particularly significant in determining outcomes in many circumstances (Oishi & Graham, 2010). These findings reinforce the often neglected significance of life domains when assessing migration outcomes, but also suggests that culture and reason for migration may be significant factors to consider when selecting these for inclusion.

In our model we emphasised the role of individual, group and cultural factors in formulating evaluations of changes since migration. We assessed individual (personal) variables in terms of values and beliefs. In our pooled analyses collectivist values had only weak associations with acculturation evaluation, with Chinese who reported higher collectivism more likely to experience positive migration experiences, with less problems. This can be seen as a reflection of the generally higher level of collectivism in this culture. Beliefs that one could

succeed by working hard, and that life was complex, were, as in previous work, related to positive acculturation outcomes, whereas a fatalistic approach to life was negatively related to comparisons with the previous life situation prior to migration. However, as with the value findings these findings were not consistent across cultures, suggesting the need for further culture specific investigations which specifically explore the mechanisms by which these individual level variables are expressed during migration. As anticipated, sensing control over ones outcomes is likely to be an important factor in determining the success of a migration.

Social support had an overall effect which at first seemed paradoxical, being positively related to both a positive evaluation of the move and degree of problems reported. This, however, can be understood in terms of the dynamic nature of such support during migration: we seek support from others for problems (leading to a positive correlation between support and problems) but that, in turn, should buffer us against these problems and lead to a positive comparison in terms of the migration. Once again this may be culturally dependent- support was a stronger predictor of acculturation evaluations in China, a collective culture where support expectations may be particularly significant. Unpacking the dynamics of these support- appraisal relationships requires further longitudinal research.

## **5.2. Practical and Military Implications**

People move for varied reasons, and practical implications of our findings inevitably vary across these motivations. Consider first those who migrated voluntarily primarily for economic or family reasons. Positive adjustment is more likely to be achieved by enabling support from others, particularly when working long hours strains existing relationships. This may require the expansion of, for example, internet cafes and other opportunities for remote

contact with family members and friends. Giving greater control, particularly over work practices, may also reduce the cynicism that can impair adjustment and consequent psychological well-being, and can inhibit civic involvement and trust towards others. Providing migrants the right to fully participate in education (e.g. by taking entrance examinations in their new location) may reduce migrant strains and tensions. City officials need to plan generally for the strain on resources that follow large-scale migration (most notably in areas of education, housing and transport infrastructure), and also establish programmes for tackling the possible discrimination towards others that was evident amongst more disadvantaged migrants. In some cases, large numbers of military personnel may move to an area as the result of a new military establishment in the region. Although we did not include military personnel in our surveys, we believe that the same principles apply for our model here: individuals who hold beliefs that “life is complex” and that “people achieve most through hard work” are most likely to evaluate their move as positive, and this will then enable a greater willingness to become involved in their new community, to build more trusting relations and to enjoy greater life satisfaction. This might be taken into account when selecting personnel for substantive movement between sites. Social support is an important component in this adjustment process, as, critically, is a sense of controlling the migration process. Finally, the acculturation experience should be recognised as complex: where there may be professional benefit there may also be a decline in some other life domains (e.g. in the maintenance of social networks, or the availability of leisure time when compared to the previous location). Amongst our US migrants, for example, there was a greater sense of pride and accomplishment but relations with friends declined. Support for personnel in these particular life domains may be therefore an important contribution to a successful settlement in the new location.



Where migration is a direct result of conflict, often following military interventions, the integration of already traumatised migrants into their new community must be a priority. This may involve not only investment in jobs and housing, but also attending to the emotional well-being of the new migrants, with physical exclusion from others in the new location exacerbating difficulties. Our Georgian data – from a group caught up in conflict - emphasised the importance of economic factors in successful migration outcomes; providing employment is likely to be central to the cognitive evaluation of a move that can then encourage civic involvement and the establishment of trusting relations with others in the new setting. Relocating migrants within a community with similar histories and culture is likely to minimise conflicts; where this was not the case adaptation was difficult, even over a long time period. Providing a sense of control over the process of migration – perhaps via community leaders who can explain the length of time and conditions in which a group will be moved to a new region – may be critical in providing a more positive appraisal of the move, and thus promoting the positive behavioural engagement and trust that can emerge from this. Relatedly, addressing existing fatalistic attitudes and encouraging beliefs that ‘effort will be rewarded’ may be particularly important for this vulnerable group. Encouraging positive appraisals of change and tackling practical and emotional problems is likely to increase migrants’ trust towards the new community, and encourage their political involvement.

### **5.3. Further research**

The current research raises many important questions which have major implications for understanding societal stability following both voluntary and involuntary internal migration, and the impact of forced migration on both the migrant population and the local communities. Large economic migrations are occurring across the world with potentially significant effects

on social cohesion in many countries. In particular, the economic and military growth of China suggests the increasing need to understand the dynamics of large population movements in this country, and their likely consequences for civil society, community engagement and public satisfaction. Further research in this country could explore the dynamics of this migration through larger, more comprehensive analyses targeted at different sub-populations of migrants, as well as more micro-level analyses of the daily experiences of migrants and their interactions with their wider environment (e.g. via diary studies).

At the same time, enforced migration as the result of war continues to occur in many parts of the world. Such migration brings many challenges, including new populations of highly vulnerable, often traumatised individuals whose interactions with the local populations can produce further conflict. Future conflict could usefully compare experiences of different forced migrants from different cities, using standardised psychiatric measures as well as psychological assessments, and employ experimental methods to identify mechanisms for intervention that reduce risks of further conflict.

Table 1:

## Part 1: Migrants in the study, descriptive statistics

	Total <i>N</i>	Region	Mean age (SD)	Gender (female)	Migrated with children
USA	200	Texas	34.71 (11.38)	50%	59%
Georgia	250	Gori, Tbilisi	43.51 (15.15)	56%	83%
China	349	Shanghai	41.20 (18.71)	52%	71%

Table 2: Questionnaire items

*Internal migration affected many people in this country. In this survey, we would like to know how and to what extent your migration has influenced you, and your close relationships with your family and friends.*

### **A. Your values**

Please rate the importance of the following values as a life-guiding principle for you. Use the following scale for rating each value using scale:

0 1 2 3 4 5 6 7 8

in which:

0= opposed to my principles

1= not important

4= important

8= of supreme importance

1. POWER (social power, authority, wealth)

2. ACHIEVEMENT (success, capability, ambition, influence on people and events)

3. HEDONISM (gratification of desires, enjoyment in life, self-indulgence)

4. STIMULATION (daring, a varied and challenging life, an exciting life)

5. SELF-DIRECTION (creativity, freedom, curiosity, independence, choosing one's own goals)

6. UNIVERSALISM (broad-mindedness, beauty of nature and arts, social justice, a world at peace, equality, wisdom, unity with nature, environmental protection)

7. BENEVOLENCE (helpfulness, honesty, forgiveness, loyalty, responsibility)

8. TRADITION (respect for tradition, humbleness, accepting one's portion in life, devotion, modesty)

9. CONFORMITY (obedience, honoring parents and elders, self-discipline, politeness)

10. SECURITY (national security, family security, social order, cleanliness, reciprocation of favors)

### **B. The migration experience**

1. How many years ago did you move to X (\_\_\_\_ years \_\_\_\_ months)

2. Overall: how much has your migration influenced your own life?

Not at all

a little

quite a lot

a great deal

3. How much has your migration influenced the lives of your family?

Not at all

a little

quite a lot

a great deal

4. Do you think migration can bring more opportunities to one's life?

Not at all

a little

quite a lot  
a great deal

### C. Control

1. How much control do you think you have had over the impact of your migration on your life?

A great deal of control  
Quite a lot of control  
A little control  
No control

2. How much control have you had over where you move to in your country?

A great deal of control,  
Quite a lot of control,  
A little control,  
No control

3. How much have you been able to control your career following migration?

A great deal of control,  
Quite a lot of control,  
A little control,  
No control

4. How much have you been able to control your family life following migration?

A great deal of control,  
Quite a lot of control,  
A little control,  
No control

### D. Evaluating changes

Here we would like you to focus on the impact on your migration on your life using the following scale.

To what extent have you experienced any problems in the following areas since your migration?

1. Physical Health
- 0 None at all to 5 a great deal
2. Emotional health
3. Finances
4. Your work
5. Relationship with your family
6. Relationship with your friends
7. Sense of security

Compared to life before you moved, please answer the following questions:

What was the impact of this migration on your:

1. Emotional health

This is much better than before

This is a little better than before

This is about the same as before  
 Things are worse than before  
 Things are much worse than before

2. Finances
3. Work situation
4. Relations with friends
5. Relations with your family
6. Relations with your romantic partner/ wife
7. (Physical) Health
8. Sense of security
9. Free time
10. Feeling I am accomplishing my goals
11. Feeling I am valuable to others
12. Sense of pride in myself
13. Feeling that I know who I am
14. Feeling my life has meaning or purpose

Overall, would you now rate the impact of your migration on your life

This is much better than before  
 This is a little better than before  
 This is about the same as before  
 Things are worse than before  
 Things are much worse than before

Sometimes events can be difficult at the present but have very different impacts over time. Looking ahead over 10 years, how do you imagine you would rate the impact of your migration (please pick just one)

It will have an overall positive impact on my life  
 It will have an overall negative impact on my life  
 It will have an equally positive and negative impact on my life  
 It will have no impact on my life

How certain are you that you will reach this judgement in 10 years time?

Very certain  
 Quite certain  
 Rather uncertain  
 Completely uncertain

How likely do you think you are to return back to your previous location in the next 5 years?

This is very likely  
 This is quite likely  
 This is not very likely  
 This will not likely at all

How certain are you that you will reach this judgement?

Very certain  
 Quite certain

Rather uncertain  
Completely uncertain

How likely do you think you are to return back to your previous location in the next 10 years?

This is very likely  
This is quite likely  
This is not very likely  
This will not likely at all

How certain are you that you will reach this judgement?

Very certain  
Quite certain  
Rather uncertain  
Completely uncertain

### **E. Help from others**

Did you have friends or family already in the new town before you moved? (Yes, no)

Please use the following scale to answer the following questions..

A great deal of support from others  
Quite a lot of support from others  
A little support from others  
No support from others

1. How much support have you received to help to deal with changes in your physical health since you migrated?
2. How much support have you received to help to deal with changes in your finances since your migration?
3. How much support have you received to help to deal with emotional difficulties since your migration?
4. How much support have you received to help to deal with overcoming worries about your security since your migration?
5. How much support have you received to help to deal with changes in your work situation (or finding work) since your migration?

How frequently do you contact your friends using the internet?

More than once daily  
Daily  
A few times a week  
Weekly  
A few times a month  
Monthly  
Less than once a month or never

How frequently do you contact your family using the internet?

(same scale)

How frequently do you contact your friends using landline phones/ cellphones?

(same scale)

How frequently do you contact your family using landline phones/ cellphones?

(same scale)

When you use the internet to communicate with your friends, how often do you use it to

- a. Get support from them to help you with emotional issues

Very often  
Quite often  
Sometimes  
Not very often  
Never

- b. Get general useful information from them (e.g. shopping, events going on)

(same scale)

- c. Get practical support (e.g. help you with your work, conduct some business)

When you use the phone/ cell phone to communicate with your friends, how often do you use it to

- d. Get support from them to help you with emotional issues

Very often  
Quite often  
Sometimes  
Not very often  
Never

- e. Get general useful information from them (e.g. shopping, events going on)

(same scale)

- f. Get practical support (e.g. help you with your work, conduct some business)

## **F. Your beliefs**

To what extent do you believe the following statements?

Strongly disbelieve,  
Disbelieve,  
Not sure,  
Believe,  
Strongly believe

Powerful people tend to exploit others.

Power and status make people arrogant.

Kind-hearted people usually suffer losses.

Kind-hearted people are easily bullied.

To care about societal affairs only brings trouble for yourself.



One will succeed if he/she really tries.  
 Hard working people will achieve more in the end.  
 Adversity can be overcome by effort.  
 Every problem has a solution.  
 Knowledge is necessary for success.  
 People may have opposite behaviors on different occasions.  
 Human behavior changes with the social context.  
 One's behaviors may be contrary to his or her true feelings.  
 One has to deal with matters according to the specific circumstances.  
 Current losses are not necessarily bad for one's long-term future.  
 There are many ways for people to predict what will happen in the future.  
 Individual characteristics, such as appearance and birthday, affect one's fate.  
 Most disasters can be predicted.  
 Good luck follows if one survives a disaster.  
 There are certain ways to help us improve our luck and avoid unlucky things.

Below are five statements that you may agree or disagree with. Using the scale below indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

- 1- I don't agree at all
- 2- I agree only a little
- 3- I agree moderately so
- 4- I agree
- 5- I strongly agree

\_\_\_\_ In most ways my life is close to my ideal.  
 \_\_\_\_ The conditions of my life are excellent.  
 \_\_\_\_ I am satisfied with my life.  
 \_\_\_\_ So far I have gotten the important things I want in life.  
 \_\_\_\_ If I could live my life over, I would change almost nothing.

Please indicate, on a the following scale, your response to the following, where

- 1- I don't agree at all
- 2- I agree only a little
- 3- I agree moderately so
- 4- I agree
- 5- I strongly agree

I enjoy taking risks.  
 I enjoy seeking danger  
 I like to know how to get around the rules.

I am willing to try anything once.  
 I seek adventure.  
 I would never go and do extreme activities (such as extreme sports like hang-gliding) - even if I had the opportunity  
 I would never make a high risk investment.  
 I like to stick to the rules.

Please answer the following using these scales

Very much so

Quite a lot

Only a little

Never

Can you trust your neighbours in your new town?

Can you trust your work colleagues in your new town?

Can you trust people in your new town?

Overall, can other people be trusted?

To what extent do you trust local politicians?

To what extent to you trust national politicians?

How much do you get involved in local community events?

Do you get involved in local or national politics?

If you were entitled to vote, did you vote in the last local elections? (yes/ no)

### **Demographics:**

1. Your gender: Male    Female

2. Your Age: \_\_\_\_\_

3. What is your ethnicity?

4. Marital status (single, married, divorced, widowed/widow)

5. Are you in a romantic relationship?

IF SO: Did you travel to your new town with your partner?

6. Do you have children?

IF SO: Did you travel to your new town with them? (yes, no)

7. What was the major reason(s) for your migration to X. You can tick several possibilities

a. Economic/ career reasons

b. To study

c. Family reasons

d. Climate

e. Refugee from war

f. Other (please specify).....

8. Education (highest education level achieved, specific listing for each culture):

9. Occupation (free listings: to be coded into 3 groups)

10. Are you working in paid work full-time or part-time?

Date of this survey: \_\_\_\_\_

**This is the end of the survey. Thank you for your participation.**

Table 3:

Problems faced during migration and comparisons with pre-migration state by culture

**Marginal means for problem (0-6 where 6 is frequent problems)**

	US	China	Georgia	Multivariate F	Effect size
Health	1.57	1.61	3.03	55.76***	.13
Emotional well-being	2.27	1.76	3.96	131.21***	.26
Finances	2.31	2.20	4.35	150.41***	.27
Work	2.12	2.28	3.66	58.08***	.14
Family relationships	2.11	2.04	.79	47.07***	.11
Relations with Friends	2.44	2.09	1.13	36.09***	.09
Security	2.06	1.94	2.57	9.23***	.02

**Comparisons with pre-migration (1 (much worse) – 5 (much better))**

	US	China	Georgia	Multivariate F	Effect size
Finances	3.82	3.65	1.33	575.37***	.63
Work	3.86	3.63	1.59	403.88***	.54
Relations with Friends	3.06	3.20	2.66	26.65***	.07
Relations with Family	3.34	3.41	2.84	36.96***	.10
Relations with Romantic Partner	3.56	3.36	2.91	29.48***	.08
Physical health	3.29	3.18	1.96	161.51***	.32
Security	3.46	3.25	3.49	5.15**	.02
Free time	3.15	3.00	3.42	7.61***	.02
Goal accomplishment	4.00	3.52	2.01	254.09***	.42
Feel of value to Others	3.77	3.41	2.91	46.51***	.12
Sense of self Pride	4.08	3.50	2.88	104.69***	.23
Knowing oneself	3.86	3.59	3.07	50.21***	.13
Sense of life Purpose	3.89	3.66	3.04	43.43***	.11
Overall impact	3.99	3.76	1.72	466.06***	.58

Table 4:

*Model Fit Across Nations*

Model	$\chi^2$	df	$\chi^2/\text{df}$	SRMR	GFI	IFI	CFI	RMSEA
Pooled	299.33	49	6.11	.05	.96	.87	.86	.08
U.S.	78.52	49	1.60	.05	.95	.92	.90	.05
China	168.2	49	3.44	.06	.94	.90	.90	.08
Georgia	158.68	49	3.24	.07	.93	.82	.80	.09
Cut-off				< .06	> .90	> .90	> .90	< .10
Value								

Table 5: Regression Weights across Nations

Regression path	<i>Pooled</i>	<i>U.S.</i>	<i>China</i>	<i>Georgia</i>
<b>Independent → mediator</b>				
value → compare(d to before)	-.10**	-.01	.08	.05
Cynicism → compare	-.21***	-.05	-.14**	-.04
Reward application → compare	.14***	.08	.12*	.22***
Life as complex → compare	.11**	.02	.02	.04
Fatalistic → compare	.04	.08	.14**	-.19***
Control → compare	.14***	.27***	.23***	.18***
Support → compare	.10**	.27***	.31***	.10
value → problems	-.09*	-.07	-.11*	.03
Cynicism → problems	.17***	-.01	.21***	-.16**
Reward application → problems	-.05	.07	.01	-.23***
Life as complex → problems	-.04	.11	-.09	.07
Fatalistic → problems	.08*	-.01	.02	.31***
Control → problems	.02	-.12	.12*	-.16**
Support → problems	.28***	.14*	.46***	-.07
<b>Mediator → Outcome</b>				
Compare → trust	.13***	.20**	.29***	.10
Compare → politically involved	.34***	.08	.13*	.16*
Compare → risk taking	.13***	.05	.09	-.10
Compare → satisfaction	.52***	.32***	.31***	.11
Problems → trust	.02	-.08	.03	-.15*
Problems → politically involved	.11**	.06	.30***	-.05
Problems → risk taking	-.03	.01	-.09	.06
Problems → life satisfaction	-.08*	-.19**	.09	.01
<b>Control Variables</b>				
Gender → compare	.03	-.03	.03	.14*
Gender → problems	.01	.06	-.02	.02
Gender → trust	.07	.02	.08	.02
Gender → politically involved	-.02	-.10	.07	-.05
Gender → risk taking	-.25***	-.24***	-.24***	-.25***
Gender → life satisfaction	.03	.08	.10*	-.09
Age → compare	-.14***	-.08	.06	-.27***
Age → problems	.05	.19*	.02	.09
Age → trust	.22***	.08	.21***	.24***
Age → politically involved	.04	.02	.19***	-.05
Age → risktake	-.27***	-.36***	-.42***	-.18**
Age → life satisfaction	.17***	-.01	.37***	.11
living → compare	.28***	.10	.07	-.09
Living → problems	-.03	-.17*	.09	-.11
Living → trust	.01	-.01	.05	.07
Living → politically involved	.09**	.06	.05	.08
Living → risk taking	.06	-.04	.06	.01
Living → life satisfaction	.07*	.13	.04	-.17**

Note \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ . Compare- compared to pre-migration

Table 6: Two-level Model Describing Nested Effects of Value, Axiom, Control, and Support on Compare (comparisons with before the move)

Parameters	<i>B</i>	<i>SE B</i>	<i>t</i>	<i>p.</i>
<b>DV = Compare</b>				
Value(China)	.066	.029	2.25	.02*
Value(Georgia)	.013	.056	.24	.81
Value(U.S.)	-.017	.042	-.42	.68
Axiom1(China)	-.084	.033	-2.54	.01*
Axiom1(Georgia)	-.051	.048	-1.06	.29
Axiom1(U.S.)	-.032	.043	-.75	.46
Axiom2(China)	.102	.042	2.45	.01*
Axiom2(Georgia)	.135	.065	2.37	.02*
Axiom2(U.S.)	.089	.049	1.81	.07
Axiom3(China)	.022	.052	.41	.68
Axiom3(Georgia)	.033	.073	.45	.65
Axiom3(U.S.)	.007	.057	.13	.89
Axiom4(China)	.129	.043	2.98	.00**
Axiom4(Georgia)	-.158	.045	-3.55	.00***
Axiom4(U.S.)	.072	.045	1.60	.11
Control(China)	.046	.010	4.55	.00***
Control(Georgia)	.021	.015	1.39	.17
Control(U.S.)	.068	.013	5.31	.00***
Support(China)	.228	.040	5.73	.00***
Support(Georgia)	.088	.057	1.54	.12

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Support(U.S.)	.217	.040	5.35	.00***
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$$R^2 = .57 \quad F(21,738) = 46.37 \quad p < .001$$

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*Note.* \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

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Table 7: Two-level Model Describing Nested Effects of Value, Axiom, Control, and Support on Problems (problems faced since the move)

Parameters	<i>B</i>	<i>SE B</i>	<i>t</i>	<i>p.</i>
<b>DV = Problem</b>				
Value(China)	-.162	.072	-2.26	.02*
Value(Georgia)	.089	.137	.65	.51
Value(U.S.)	-.065	.102	-.64	.52
Axiom1(China)	.302	.081	3.72	.00***
Axiom1(Georgia)	-.139	.118	-1.18	.24
Axiom1(U.S.)	-.049	.105	-.47	.64
Axiom2(China)	-.069	.102	-.68	.50
Axiom2(Georgia)	-.256	.157	-1.63	.10
Axiom2(U.S.)	.045	.120	.37	.71
Axiom3(China)	-.405	.128	-3.17	.00**
Axiom3(Georgia)	.460	.179	2.57	.01*
Axiom3(U.S.)	.270	.140	1.93	.05
Axiom4(China)	.028	.106	.27	.79
Axiom4(Georgia)	.545	.109	5.02	.00***
Axiom4(U.S.)	-.039	.110	-.36	.72
Control(China)	.054	.025	2.19	.03*
Control(Georgia)	-.040	.037	-1.09	.28
Control(U.S.)	-.056	.031	-1.80	.07
Support(China)	.938	.097	9.66	.00***



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Support(Georgia)	-.169	.139	-1.22	.22
Support(U.S.)	.164	.099	1.66	.09

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$$R^2 = .28 \quad F(21,738) = 13.99 \quad p < .001$$

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*Note.* \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

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Table 8: Two-level Model Describing Nested Effects of Compare and Problem on Trust, Political Involvement, Risk Taking, and Life Satisfaction

Parameters	<i>B</i>	<i>SE B</i>	<i>t</i>	<i>p.</i>
<b>DV = trust</b>				
Compare(China)	.223	.042	5.36	.00***
Compare(Georgia)	.321	.052	6.17	.00***
Compare(U.S.)	.193	.037	5.19	.00***
Problem(China)	-.008	.022	-.37	.71
Problem(Georgia)	.002	.030	.05	.96
Problem(U.S.)	-.023	.027	-.84	.40
$R^2 = .06 \quad F(6,753) = 8.47 \quad p < .001$				
<b>DV = political involvement</b>				
Compare(China)	.123	.049	2.54	.01*
Compare(Georgia)	.156	.061	2.57	.01*
Compare(U.S.)	.194	.043	4.47	.00***
Problem(China)	.127	.025	5.04	.00***
Problem(Georgia)	-.053	.035	-1.51	.13
Problem(U.S.)	.049	.032	1.54	.12
$R^2 = .17 \quad F(6,753) = 25.47 \quad p < .001$				
<b>DV = risk taking</b>				
Compare(China)	.058	.056	1.03	.31

Compare(Georgia)	-.155	.070	-2.21	.03*
Compare(U.S.)	.050	.050	1.00	.32
Problem(China)	.009	.029	.32	.75
Problem(Georgia)	.047	.040	1.16	.24
Problem(U.S.)	-.010	.037	-.27	.78

$R^2 = .09$   $F(6,753) = 12.57$   $p < .001$

**DV = life satisfaction**

Compare(China)	.444	.056	7.92	.00***
Compare(Georgia)	.273	.070	3.89	.00***
Compare(U.S.)	.561	.050	11.18	.00***
Problem(China)	-.006	.029	-.20	.83
Problem(Georgia)	.015	.040	.38	.70
Problem(U.S.)	-.113	.037	-3.06	.00**

$R^2 = .34$   $F(6,753) = 63.45$   $p < .001$

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*Note.* \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

Table 9

## Interview Questions

*When large numbers of people move into a city, particularly over a short time, it can have both positive and negative impacts on those already living there. Our data hopes to clarify exactly what impacts exist among the Greater Houston Texas area cities. Some of your answers to the below questions may duplicate or overlap other answers. Formal data is not necessary but welcome in completing this survey. The survey can be completely answered based on your personal thoughts resulting from your personal experiences in living in your city as well as from your position.*

*Evaluating the migration*

1. Which are the largest groups that have moved to the city in the last 5 years? We are interested in ones that came from within your own country
2. How long do these groups usually stay in the city?
3. What kind of person migrates to your city?
4. Can you suggest some of the positive factors in this migration?
5. Can you suggest some of the negative factors in this migration?

*Resource challenges*

6. What are the biggest challenges that your city faces as a result of this migration?
7. What kinds of resources are required by this new group (e.g. housing, education, medical services, entertainment etc)?
8. To what extent are you able to provide these resources for this group?
9. To what extent do the resources needed by these migrants put pressure on the existing populations and structures in your city?
10. What kind of responses has your office made in the last five years to meet the migrant's needs?
11. What kind of formal *and* informal relationships exist between your office and some of the major groups that are moving into your city?
12. What kinds of adaptations might be needed in the future to meet changing patterns of migration?

*Migrant characteristics and reactions*

13. How noticeable in your community are the migrants in your city? How can you notice them?
14. How do people in your city who are not migrants react to these migrants?
15. Are there difficulties in relations between any particular group of residents (non-migrants) and the migrants?
16. What can be done to help the local people interact with these migrants?
17. Are migrants generally different from those established already in your community in terms of their personalities?
18. Do migrants behave differently from those that live already in your community?
19. Do you think there have been any particular changes in the characteristics of migrants now as compared to five years ago?
20. Do you have anything else to say about these migrants in your city?

Table 10:

## Interview Respondents by Country

Number	Country	Association or Role
1	Georgia	Younger lawyers association
2	Georgia	Minister of Internally Displaced Persons
3	Georgia	Ministry of Internally Displaced Persons
4	Georgia	Younger lawyers association
5	Georgia	Department for Refugees Relations
6	Georgia	Humanitarian Centre of Georgia
7	Georgia	Ministry of Internally Displaced Persons
8	Georgia	Ministry of Internally Displaced Persons
9	Georgia	Union of women who lost their spouses in war
10	Georgia	National Network against violence
11	Georgia	ACCN Research Centre
12	Georgia	Ministry of Internally Displaced Persons
13	China	Community population management administrator
14	China	Community medical service centre
15	China	Shanghai Commission of Population
16	China	Shanghai Normal College school
17	China	Shanghai migrant workers office
18	China	Shanghai food and drug administration
19	China	Pudong Municipal Council
20	China	Shanghai Development and Reform Commission
21	China	Huajing Police Station
22	China	Journalist Xinmin Evening News
23	China	Shanghai Health Education Institute
24	China	Shanghai Health Education Institute
25	China	Sociology Lecturer, Tongji University
26	USA	City Mayor
27	USA	City Mayor
28	USA	County Judge
29	USA	City Mayor
30	USA	City Mayor
31	USA	City Mayor
32	USA	City Mayor
33	USA	City Mayor
34	USA	County Judge
35	USA	City Mayor
36	USA	Texas State Rep.
37	USA	City Planning Director
38	USA	The Woodlands (Local Housing Association)

Table 11: Main interview categories and responses

Category	Subcategory	USA	China	Georgia	Totals
Social background	Professionals/ elites	6	10	1	17
	Civil servants	0	2	4	6
	Unskilled workers	3	10	0	13
	Agricultural workers	0	3	11	14
	Everyone/ all types or mixed groups	6	5	1	12
Positive effects of Migration	Allows migrants housing	0	0	5	5
	Helps locals the housing market	7	0	0	7
	Help shopping and the local economy/ consumption	6	5	0	11
	Taxes generated	10	1	0	11
	Provide skills for city	2	5	0	7
	Make city more dynamic/creative	1	5	0	6
	Provide labour force	2	10	1	13
	No advantages for migrants	0	0	5	5
Negative effects	Traffic	8	5	0	13
	Educational pressures	5	9	2	16
	Pressures on medical resources	0	7	0	7
	General criminal behaviour	2	6	0	8
	Social isolation of newcomers/ lack of integration	0	3	4	7
Changed over time'	Yes, easier for migrant	2	1	6	9
	No changes	5	3	0	8
Challenges for city	New infrastructure needed	11	1	5	17
	Educational resources	7	7	6	20
	Sewerage	4	1	0	5
	Water safety	4	0	0	4
	Road system /transport	13	2	0	13
	Public safety/ policing	9	3	0	12
	Health care	6	12	7	25
	Housing	6	8	8	22

	General financial costs/burden	7	2	5	14
Migrants noted by	Language spoken	1	5	1	7
	Accent	2	6	0	8
	Education level	0	5	1	6
	Appearance (clothing)	1	4	0	5
	Behaviour (generally worse)	0	7	0	7
	Their general habits (not specified)	1	4	0	5
	Not noticeably different	5	6	8	19
Locals' reactions	Sympathetically or Positively	6	3	7	16
	Mixed reaction	5	8	2	15
	Generally no problems	8	4	8	20

Note: Responses given by at least 4 interview respondents in any culture

Figure 2: Primary reasons for migration across the 3 countries

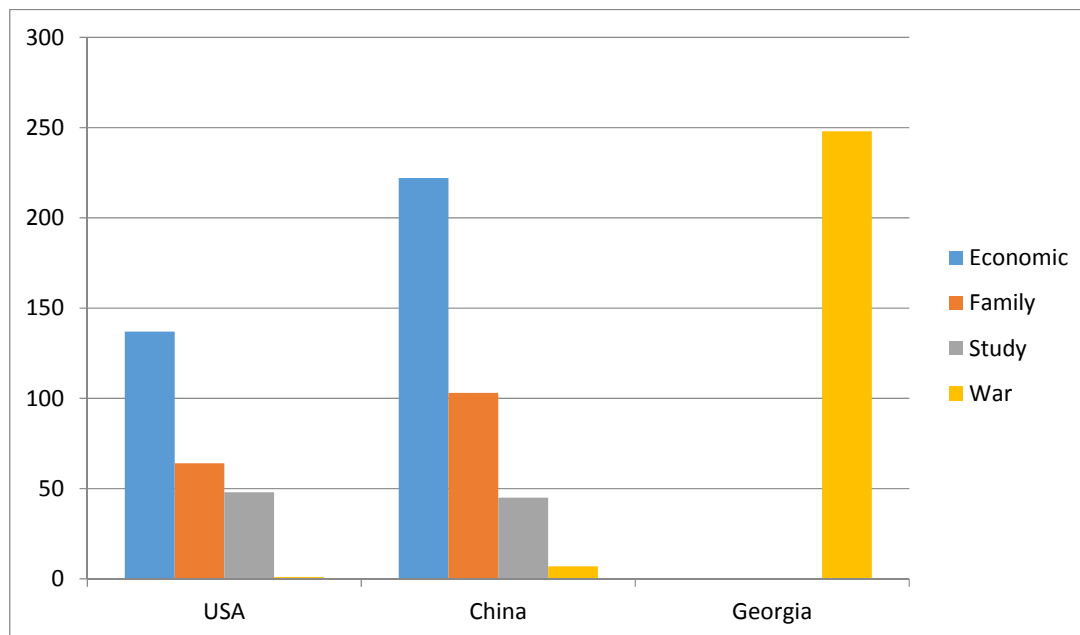




Figure 3: Pooled data

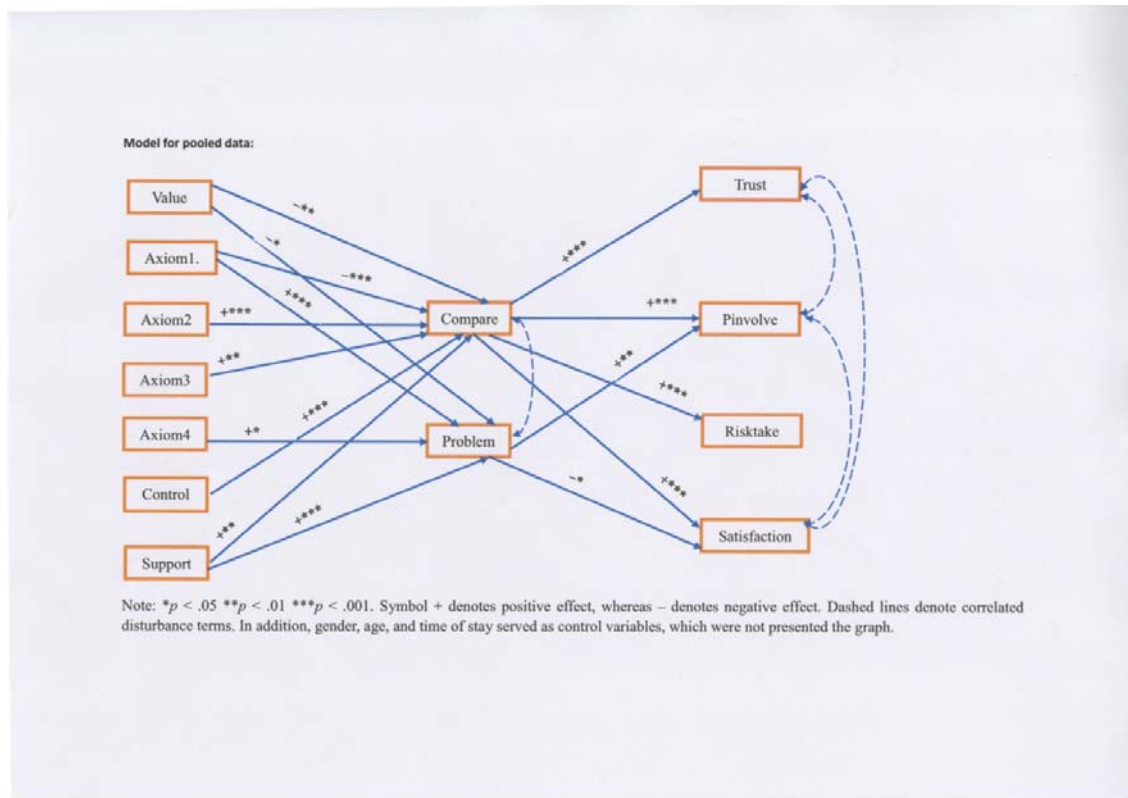


Figure 4: USA only

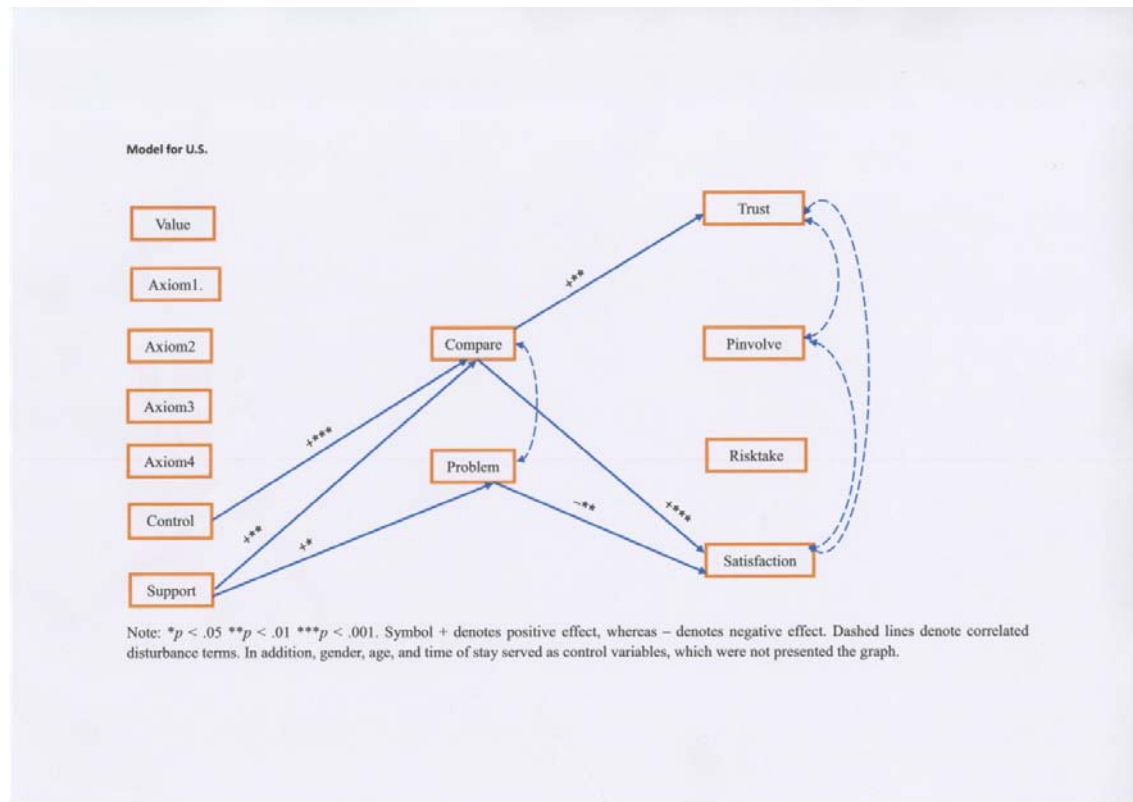


Figure 5: China only

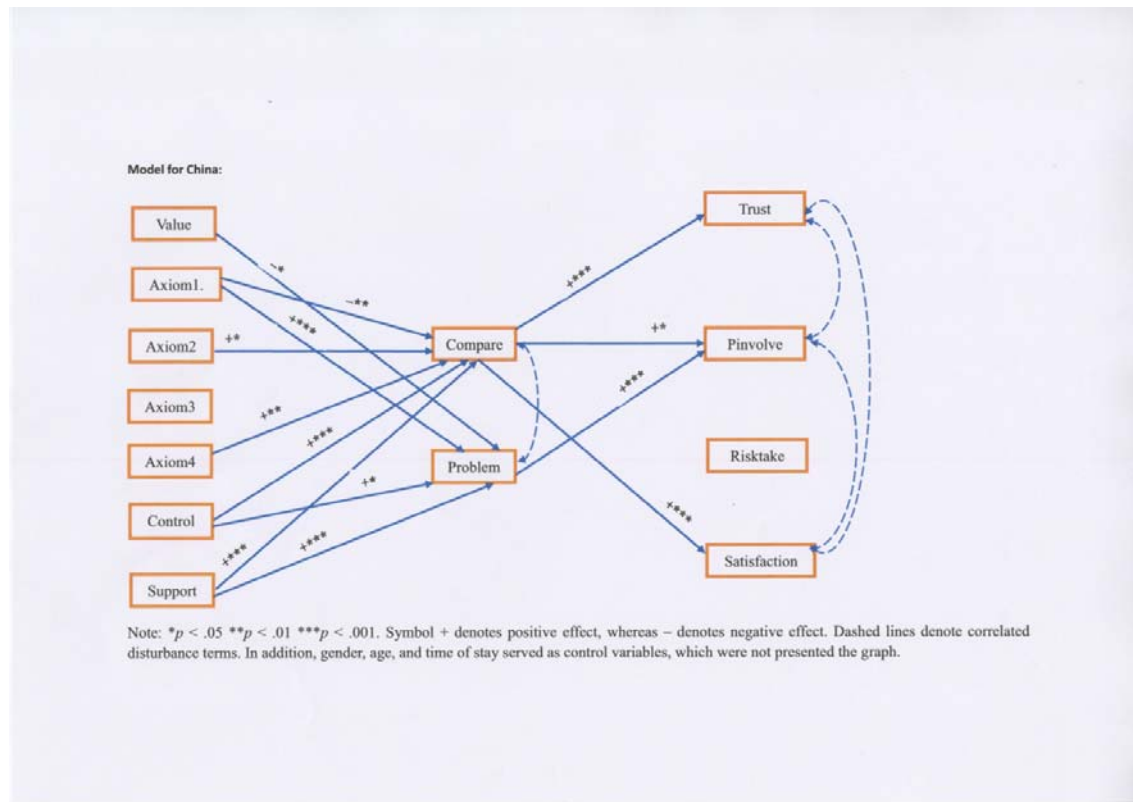
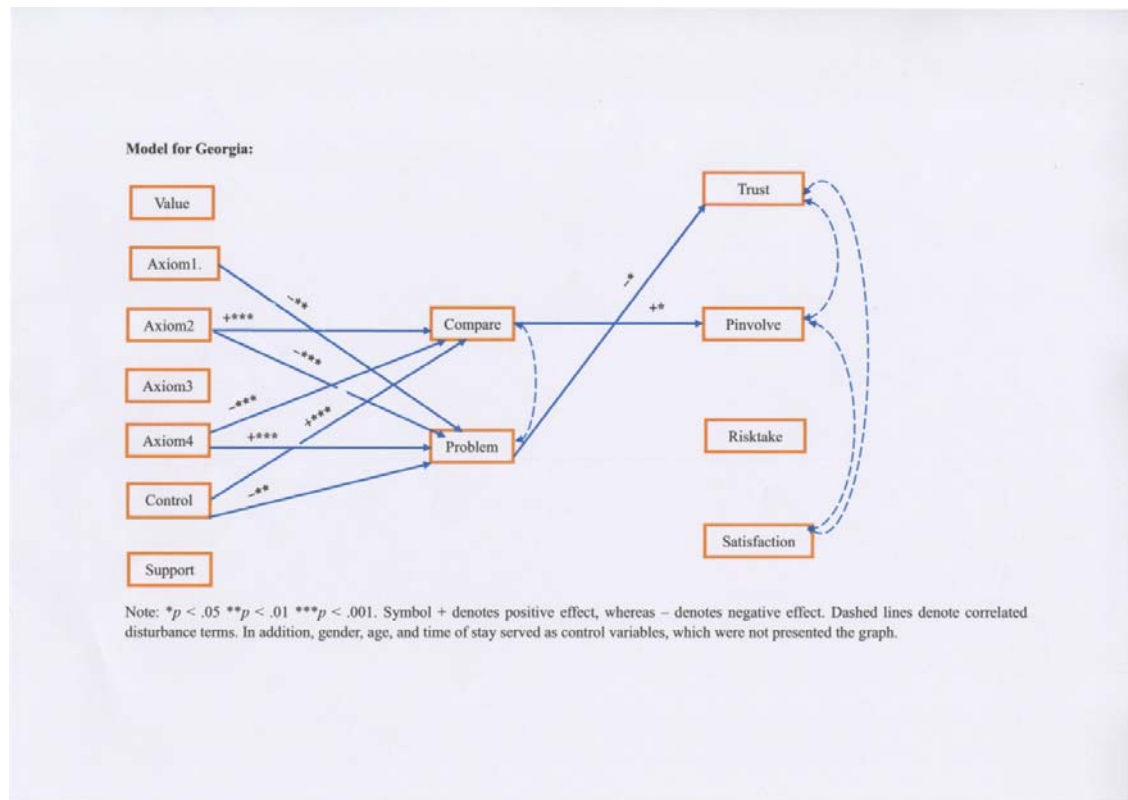


Figure 6: Georgia only



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